Table Key

RHD = right- hemisphere damage

LHD = left-hemisphere damage

PN = prenatal

+ S = patients suffering from seizures

–S =   patients with no seizure activity

+Temp = injury includes damage to the temporal lobe

–Temp = injury spares the temporal lobe

+Frontal = injury includes damage to the frontal lobe

–Frontal = injury spares the frontal lobe

NR = not reported

NSR = no specifics reported

N/A = not applicable

X_O = mean age of onset

X_T = mean age at testing

Note that a "<" indicates worse performance regardless of the specific measure used
Note that if two groups are described as "=" , this indicates merely that they did not differ significantly.

TABLE 1: Summary of IQ data from studies of children with focal brain injury							
Authors	**Patients**					**RHD vs. LHD ?**	**RESULTS?**
	Site	**Neuro-imaging?**	**Age of Onset**	**Age At Testing**	**Seizures ?**		
Woods and Teuber (1973)	19 RHD 17 LHD	NO	PN - 15 years	NR	NR	YES	**FIQ**: LHD < controls RHD < controls LHD = RHD **PIQ**: LHD < controls RHD < controls **VIQ**: LHD < controls RHD = controls
Woods (1980)	23 RHD 27 LHD	NO	**"early"(<1yr)** 1O RHD = RE, 11 LHD = LE **"late" (>1yr)** 13 RHD = LR $X_O = 6;4$ 6 LHD = LL $X_O = 5;7$	RE: $X_T = 14;01$ LE: $X_T = 17;02$ RL: $X_T = 10;03$ LL: $X_T = 8;06$	RE: 5(–S) 5 (+S) LE: 8 (–S) 3 (+S) RL: 11 (–S) 2 (+S) LL: 13 (–S) 3 (+S) Comparisons between +S and –S groups NOT made	NO	**VIQ**: RE < population mean & controls LE < population mean & controls RL = population mean & controls LL < population mean & controls **PIQ** : RE < population mean & controls LE < population mean & controls RL < population mean & controls LL < population mean & controls

Vargha-Khadem et al. **(1985)**	28 LHD 25 RHD	some	33 **"Prenatal"** (<2mo.) (16 RHD, 18 LHD) 11**"early postnatal"** (2 mo. - 5 yr.) (5 RHD, 6 LHD) 9 **"late postnatal"** (5 yr. - 14 yr.) (5 RHD, 4 LHD)	NSR At least > 2yrs post onset	NR	NO	prenatal RHD: VIQ = PIQ prenatal LHD: VIQ < PIQ early postnatal RHD: VIQ = PIQ early postnatal LHD: VIQ < PIQ late postnatal RHD: VIQ = PIQ late postnatal RHD: VIQ = PIQ
Aram et al. **(1985)**	8 RHD 8 LHD	YES	**RHD**: X_O = 1;4 (2 mo. - 9;0) **LHD**: X_O = 1;6 (**1** mo. - 6;2)	**RHD**: X_T = 3;10 (1;8 - 5;10) **LHD**: X_T =4.;6s (2mo. - 8;2)	none	NO	**FIQ**: LHD < controls RHD < controls **PIQ**: LHD < controls RHD < controls **VIQ**: LHD = controls RHD < controls
Riva and Cazzaniga (1986)	26RHD 22LHD	some	**"early"(<1yr)** 13 RHD = RE, 10 LHD = LE **"late" (>1yr)** 13 RHD = LR 12 LHD = LL X_O = 6;6	**early(<1yr)** X_T = 8;5 **late(>1yr)** X_T = 11;8	none	NO	**FIQ**: LE = controls LL = controls RE < controls RL < controls **PIQ**: LE < controls LL = controls RE < controls RL < controls **VIQ**: LE < controls LL = controls RE = controls RL = controls
Riva et al. (1986)	8RHD 8LHD	YES	**RHD**: X_O = 4;6 (1;8 - 8;3) **LHD**: X_O = 6;4 (0;8 - 12;8)	**RHD**: X_T = 10;7 **LHD**: X_T = 11;1	5 RHD (-S) 3 RHD (+S) 5 LHD (-S) 3 LHD (+S) Comparisons between +S and –S groups NOT made	NO	**PIQ**: LHD < controls RHD < controls **VIQ**: LHD < controls RHD = controls

Study	N		Lesion onset	Age at test	Subgroups		Results
Nass et al. (1989)	12 RHD 14LHD	YES	pre- or perinatal	**RHD**: $X_T = 8;6$ **LHD**: $X_T = 6;8$		YES	**FIQ**: LHD > RHD **PIQ**: LHD = RHD **VIQ**: LHD > RHD LHD: PIQ < VIQ RHD: PIQ = VIQ
Vargha-Khadem et al. (1992)	40 RHD 42 LHD	YES	pre- or perinatal	**RHD (–S):** $X_T = 11;3$ **RHD (+S):** $X_T = 11;6$ **LHD (-S):** $X_T = 12;9$ **LHD (+S):** $X_T = 11;8$	24 RHD (–S) 16 RHD (+S) 28 LHD (–S) 14 LHD (+S)	YES	**FIQ:** RHD=LHD +S < controls -S < controls +S < -S **PIQ:** RHD=LHD +S < controls -S < controls +S < -S **VIQ:** RHD = LHD +S < controls -S = controls +S -S
Eisele and Aram (1993)	12 RHD 21 LHD	YES	**RHD**: $X_O = 1;06$ (PN-9;08) **LHD**: $X_O = 2:03$ (PN-11;07)	**RHD**: $X_T = 5;08$ (2;06-14;07) **LHD**: $X_T = 7;05$ (2;0 7 - 14;02)	none	YES	**VIQ**: LHD = RHD =controls **PIQ**: LHD = controls RHD < LHD = controls RHD < controls
Ballantyne et al. (1994)	9 RHD 8 LHD	YES	pre- or perinatal	RHD: X_T= 11;2 (4;11 - 20;1) LHD: $X_T = 9$ (4;1 - 16;5)	NR	NO	**FIQ**: LHD < controls RHD < controls **PIQ**: LHD < controls RHD < controls **VIQ**: LHD < controls RHD < controls LHD: PIQ = VIQ RHD: PIQ < VIQ

| Muter et al. (1997) | 18 RHD 23 LHD | some | pre- or perinatal | $X_T = 4;11$ (3;6 to 6;8) | 11RHD (–S) 4RHD (+S) 15 LHD (–S) 8LHD (+S) | YES | **Two testing periods (t1,t2) one year apart** **FIQ**: RHD=LHD (t1 and t2) +S < controls (t1 and t2) -S < controls (t1 and t2) +S < -S (t1 and t2) **PIQ:** RHD=LHD +S < controls (t1 and t2) -S = controls (t1) -S < controls (t2) +S < -S **VIQ:** RHD = LHD (t1 and t2) +S < controls (t1 and t2) -S = controls (t1 and t2) +S < -S |

Bates, Vicari, and Trauner (1999)	15 RHD 28 LHD	YES	< 6 mo.	3 - 9 yr.	8RHD (–S) 7RHD (+S) 16LHD (–S) 11LHD (+S)	YES	**PIQ**: LHD < controls RHD < controls LHD = RHD **VIQ**: LHD < controls RHD < controls LHD = RHD
	27 RHD 46 LHD	YES	< 6 mo.	3 - 14 yr.	20RHD (–S) 7RHD (+S) 35LHD (–S) 11LHD (+S)	YES	**FIQ**: LHD < controls RHD < controls LHD = RHD

Authors	Patients					RHD vs. LHD ?	Tests Used	Results
	Site	Neuro-imaging ??	Age of Onset	Age At Testing	Seizures?			

Table 2: Summary of data from studies of children with focal brain injury using various language assessment measures

Authors	Site	Neuro-imaging ??	Age of Onset	Age At Testing	Seizures?	RHD vs. LHD ?	Tests Used	Results
McFie (1961)	24RHD 14LHD	NO	**35 infantile (before 1yr.)** (19 RHD,11 LHD) **8 juvenile (after 1yr.)** (5 RH,3 LH) range of onset 15 mo - 5 yr.	NR	NR	NR	clinical/observational	7 RH infantile with clinical dysphasia 1 RH juvenile with clinical dysphasia 4 LH infantile with clinical dysphasia 4 LH juvenile with clinical dysphasia
							Weigl Sorting test Sentence learning test Memory for designs test	**LHD:** impaired on Weigl Sorting and Sentence Learning but NOT on memory for designs **RHD:** impaired on Weigl Sorting and Sentence Learning but NOT on memory for designs
Basser (1962)	48 LHD, 54 RHD	No	72"pre-specch onset" (34 L,38 R) 30 "post-speech onset" (14 L,16 R)	NR	NSR	NO	clinical/observational	none of the RHD or LHD had "dysphasia" **8/48 LHD** had stuttering or articulation problems **8/48 LHD** had reduced or nonexistent speech **7/54 RHD** had stuttering or articulation problems **11/54** RHD had reduced or nonexistent speech **34 pre-speech onset** LHD had delayed first word production **38 pre-speech** onset RHD had delayed first word production
Alajouanine and Lhermitte (1965)	32 LHD patients ONLY	No	from 6 - 15 years	NR	NR	N/A	clinical/observational	**32/32** impaired expression (written, spoken, gestural) **7/32** exhibited paraphasias **10/32** impaired comprehension **18/32** had alexia

Study	Patients		Onset	Test age			Test	Results
Woods and Teuber (1978)	31 RHD 34 LHD	No	**LHD:** X =6.;3 (1;4 -15;2) **RHD:** X=7;2 (1;9 -14;4)	NR	NR	NO	clinical/observational	25/34 LHD had language disturbances post-onset 4/31 RHD had language disturbances post-onset (3 were pre-morbid left handers)
Woods and Carey (1979)	27 LHD patients ONLY	NO	**Early LHD (before 1yr)**, N = 11 **Late LHD (after1yr)**, N = 16 X_O = 5;7 yr. (1;2 yr. to 15.;1)	Early LHD X_T = 17;8 Late LHD X_T =15;3yrs	Early LHD: 2(–S) 9(+S) Late LHD: 15(–S) 1(+S) Comparison between +S and –S groups NOT made	N/A	Oldfield-Wingfield Picture Naming	Early LHD = controls Late LHD < controls
							Spelling	Early LHD < controls Late LHD < controls
							Rhymes(complete 6 nursery rhymes)	Early LHD = controls Late LHD = controls
							Sentence Completion (from the BDAE)	Early LHD = controls Late LHD < controls
							Relations Task (possible /not)	Early LHD = controls Late LHD < controls
							That-Clause syntax	Early LHD = controls Late LHD < controls
							Ask-Tell distinction	Early LHD = controls Late LHD = controls
							Token-Test	Early LHD < controls Late LHD < controls
Vargha-Khadem et al. (1985)	**28 LHD** 25 RHD	some	33 "Prenatal" (<2mo.) (16 RHD, 18LHD) 11"early postnatal" (2mo. - 5 yr.) (5 RHD, 6 LHD) 9 "late post-natal" (5yrs - 14 yr.) (5 RHD, 4 LHD)	NR At least < 2yrs post onset	NR	YES	Token-Test	RHD > LHD All 3 RHD groups = controls All 3 LHD groups < controls Late postnatal LHD < prenatal and late RHD
							Oldfield-Wingfield Picture Naming	RHD > LHD Prenatal RHD = controls Early postnatal RHD = controls Late postnatal RHD = controls All 3 LHD groups < controls Late postnatal LHD < all other groups
Aram et al. (1985)	8RHD 8LHD	YES	**RHD:** X_O = 1;4 (2 mo. - 9;0) **LHD:** X_O = 1;6 (**1** mo. - 6;2)	**RHD:** X_T =3;10 (1;8 - 5;10) **LHD:** X_T =4.;6 (2 mo. - 8;2)	none	NO	**PPVT**	LHD < controls RHD < controls
							EOWPVT	LHD < controls RHD = controls
							Northwestern Syntax Screening Test (NSST)	LHD < controls RHD = controls
							The Photo Articulation Test	LHD = controls RHD = controls
							Free speech : mean length of utterance (MLU) in morphemes	LHD < controls RHD = controls
							Free speech : Developmental sentence scoring (DSS)	LHD < controls RHD = controls